

Remarks

Claims 23 and 24 stand rejected under 35 USC §112 as being indefinite. The Applicants note with appreciation the Examiner's helpful comments with respect to antecedent basis for the copolymer "(C-i)." The Applicants have amended Claims 23 and 24 to delete that term. Withdrawal of the rejection is respectfully requested.

Claims 1, 4-8, 12, 13 and 23 stand rejected under 35 USC §102 as being anticipated by or under §103 as being obvious over Saeki. The Applicants respectfully submit that Saeki fails to anticipate or render obvious those claims. Reasons are set forth below in detail.

The rejection states that the intrinsic viscosity disclosed in Saeki would meet the molecular weight of the claimed copolymer. Specifically, the rejection states that Saeki "does not expressly set forth the molecular weight of copolymer (C), it is reasonably believed that the exemplified intrinsic viscosities would meet said molecular weight limitation." The rejection further states that the burden is shifted to the Applicants to establish that the claimed product is not the same as or obvious over Saeki.

The Applicants respectfully submit that the rejection is based merely on conjecture. There are no real facts of record indicating that the intrinsic viscosities would meet the claimed molecular weight limitation. The Applicants respectfully submit that this is merely a guess that is not supported by fact. However, the Applicants respectfully submit that they have already provided facts that are relevant to that determination with respect to the intrinsic viscosities meeting the claimed molecular weight. In that regard, the Applicants previously demonstrated that the reduced viscosity of C-i in Nakajima (previously cited and cited again in combination with Saeki in a different rejection), corresponds to a number average molecular weight of

24,000. Saeki discloses an intrinsic viscosity that is different from Nakajima, but in close proximity.

On the other hand, the Applicants are unaware of the correlation for calculating the number average molecular weight from the intrinsic viscosity. Therefore, the Applicants do not believe that it is possible to directly calculate the number average molecular weight from the intrinsic viscosity disclosed in Saeki. However, since C-i (reduced viscosity: 0.65) of Nakajima and C-2 (intrinsic viscosity: 0.69) of Saeki were produced by very similar production methods with very similar production conditions including the similar starting compositions, it is reasonably expected by those in the art that the products thereof have nearly the same molecular weight. Therefore, the number average molecular weight (M_n) of C-2 of Saeki is considered to be 24,000, which corresponds to that of C-i of Nakajima.

Similarly, those skilled in the art would reasonably believe that the number average molecular weights of C-3, C-4 and C-5 (intrinsic viscosity: 0.70) are similarly outside the range of the number average molecular weight of the claimed component (C).

Therefore, the components having the intrinsic viscosity or reduced viscosity disclosed in Saeki (and Nakajima) are different from the claimed component (C) having the number average molecular weight (M_n) of 25,000 to 60,000. Therefore, the Applicants respectfully submit that Saeki fails to anticipate Claims 1, 4-8, 12, 13 and 23. Moreover, the Applicants respectfully submit that Saeki fails to provide teachings that would lead one skilled in the art toward the Applicants' claimed number average molecular weight. This is clearly as a result of the fact that Saeki does not refer to molecular weight. Instead, Saeki refers to viscosities. There would therefore be no motivation to modify molecular weights given the fact that they are not even discussed. Withdrawal of the rejection on this basis is respectfully requested.

The Applicants' claimed component (B) specifies particle size and swell index of the rubber polymer, as well as the number average molecular weight of the acetone-soluble moiety of 20,000 to 100,000.

The reasons for these ranges may be found in the Applicants' Specification at page 8, lines 34-37 through page 9, lines 1-34. Specifically, if the swell index is outside the range, it is difficult to obtain a desired impact strength. If the number average molecular weight of the acetone-soluble moiety is outside the range, it is difficult to obtain desired impact strength and fluidity.

Thus, Saeki does not disclose, teach or suggest that the Applicants' claimed component (B) has the number average molecular weight of 20,000 to 100,000, particle size or swell index as well as their effects. The Applicants respectfully submit that there is not only no disclosure of those claimed aspects, but there is nothing on the record that would indicate that those claimed features are inherently present as suggested in the rejection. It is only speculation in the rejection that the Applicants' claimed particle size, for example, in its component (B) is the same as or even similar to that recited in Claim 1. It should be remembered that a rejection that relies on inherency (even though term is not actually used in the rejection) that the claimed aspect or characteristic that is allegedly inherent must "necessarily" be present. The rejection does not provide facts that indicate that the Applicants' claimed molecular weight, particle size and swell size with respect to the Applicants' claimed component (B) is "necessarily" present. In fact, there is no discussion with respect to particle size and swell index. It inherently follows that the Applicants' claimed swell size and particle size is not "necessarily" present. Also, the Applicants have already established that the Applicants' claimed molecular weight is not "necessarily" the same. In fact, the Applicants have provided facts that demonstrate that the

molecular weight is more than likely to be quite different. Withdrawal of the rejection on this basis is also respectfully requested.

Claims 2, 3, 11, 14-18, 21, 22 and 24 stand rejected over the hypothetical combination of Nakajima with Saeki. The Applicants respectfully submit that Nakajima fails to provide teachings or suggestions that would lead one skilled in the art toward the subject matter of those claims. Reasons are set forth below.

The Applicants' claimed thermoplastic resin composition comprises a polyamide resin (component (A)), a graft polymer obtained by a rubber polymer having certain swell index, an acetone-soluble moiety and particle size (component B)), and an unsaturated carboxylic acid-modified polymer with a certain number average molecular weight (component (C)), which provides excellent impact strength, fluidity, bend modulus, heat resistance, paintability and chemical resistance.

With the specific recitation of the number average molecular weight of the acetone-soluble moiety of component (B), as well as the number average molecular weight of component (C), the claimed thermoplastic resin composition provides excellent chemical resistance and other properties. The compositions of Saeki and Nakajima do not provide those properties.

This is shown in the Applicants' Examples. In Comparative Example 1, in which only component (B) is added without component (C), the desired impact resistance and chemical resistance were not obtained. In Comparative Example 2, in which component (B) with component (C) having a number average molecular weight outside the claimed range are added, the desired chemical resistance was not obtained.

Thus, the specific claimed composition as well as the desired effects obtained in the composition are not disclosed, taught, suggested by or obvious over Saeki or Nakajima or the

combination thereof. Since there is no motivation for specifying the composition as claimed in Saeki or Nakajima, such a combination would still not result in the claimed composition.

The Applicants have already factually established that the Nakajima molecular weights are outside of the Applicants' claimed range. When this fact is taken in conjunction with the fact that the Saeki molecular weights are different, the result of combining Nakajima with Saeki would still be a composition having molecular weights outside of the Applicants' claimed range with respect to component (C).

Nakajima also fails to provide disclosures, teachings or suggestions that would cure the deficiencies set forth above with respect to component (B). Thus, a hypothetical combination of Nakajima with Saeki would still not result in the subject matter of Claims 2, 3, 11, 14-18, 21, 22 and 24. Withdrawal of the rejection is respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,



T. Daniel Christenbury
Reg. No. 31,750
Attorney for Applicants

TDC/vp
(215) 656-3381